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ABSTRACT

The glossary is one of twenty in various subject areas of vocational education designed to assist the student in vocabulary mastery for particular vocational education courses. They are part of the Vocational Reading Power Project, Title III, E.S.E.A. This glossary is for a course in industrial electronics. It is divided into two parts: one provides the student with two definitions for each term listed; the second part lists the same words with space for the student's definition. It is intended that upon completion of the course, mutually agreeable definitions for each term will be arrived at by the instructor and the students. These definitions will be made available to future students taking the course. (AG)

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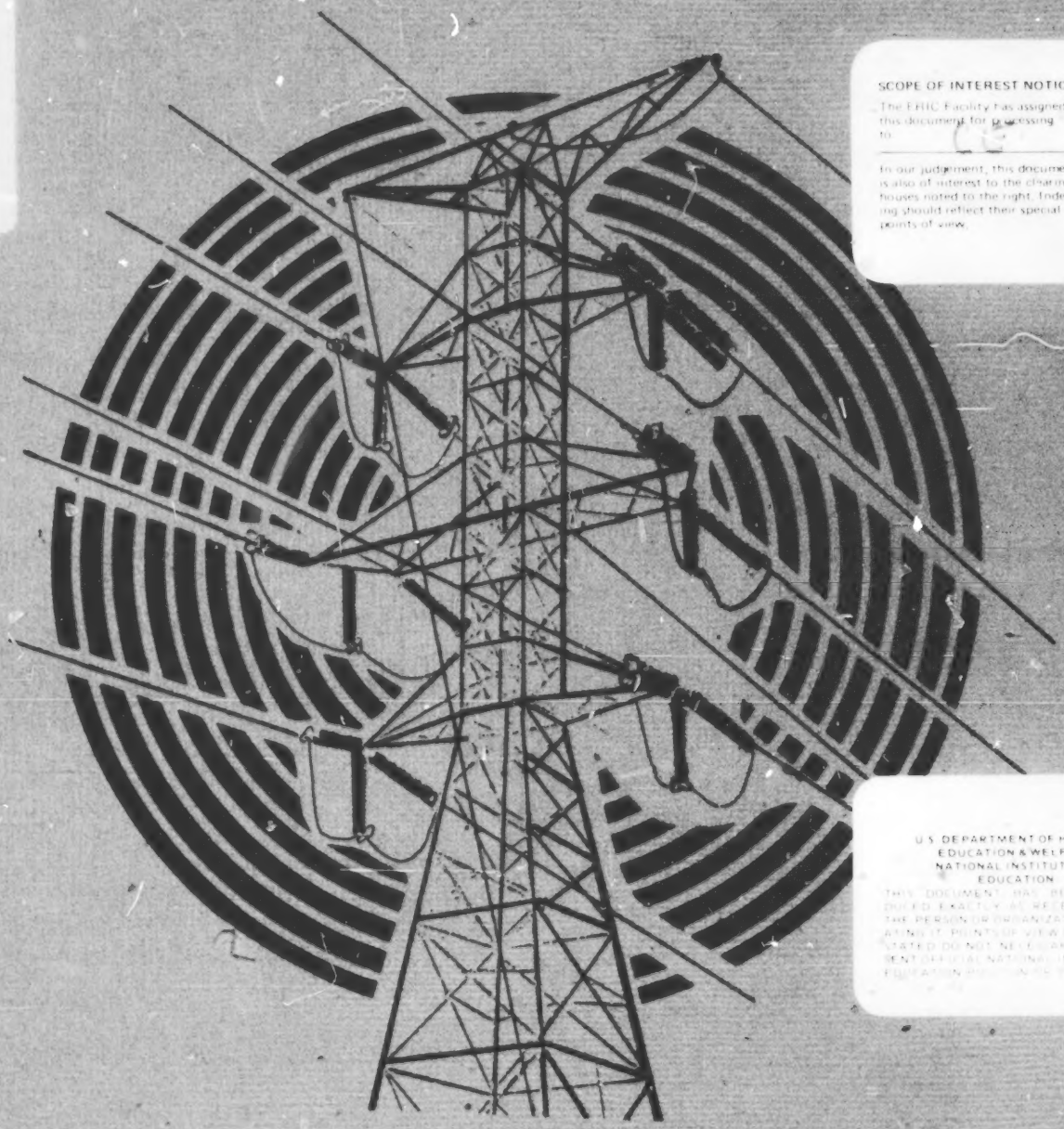
INDUSTRIAL ELECTRONICS
Glossary of Key Words



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Vocational Reading Power
E.S.E.A. Title III

CE 000 884

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To The Student

This Glossary of Key Words was prepared to help you in your course. The words that follow were judged by your instructor to be the most important for you to understand.

Directions

The Glossary is divided into two parts. The first part lists the key words at the left side of the page. Across from the key words are two definitions for that word. The "A" definition is more difficult and specific. The "B" definition is easier and more general. During a learning activity, you are to use both definitions to help you understand. After the learning activity, you are to write your definition of the word as you understand it.

The second part just lists words. There is space for you to write your understanding of those words. Also, at the end of the booklet are blank lines. Here, you and your instructor will list and define the words which were left out.

At the end of the course, your definitions and the instructor's definitions will be joined together. These will be printed and given to the students who come after you have graduated. It is hoped that, with your help, the future students of vocational education will be greatly benefited.

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a) PRIMARY
b) SECONDARY

ADDEND	a) A quantity which, when combined to another quantity (called the augend) produces a result called the sum. b) Arithmetic, sum.
ADDER	a) An arrangement of logic gates that adds to binary digits and produces sum and carry output. b) A circuit in an electronic computer which registers the sum of two or more numbers.
ALLOY	a) A composition of two or more elements of which at least one is a metal. It may be either a solid or solution. b) Same.
ALTERNATING CURRENT (AC)	a) A flow of electricity which reaches maximum in one direction, decreases to zero, then reverses itself and reaches maximum in the opposite direction. b) A current of electrons that moves first in one direction and then in the other.
ALTERNATOR	a) An electromechanical device that produces a current varying in amplitude and polarity. b) A generator which produces an alternating current.
AMPERE	a) The unit of measure of electron or current flow representing the flow of one coulomb per second past a given point in a circuit. b) The unit of an electrical current.
AMPLIFICATION	a) The ability to control a relatively large force such as in a transistor where a small variation in base current results in a large variation of collector current. b) Same.
AMPLIFIER	a) A device which draws power from a source other than the input signal and which produces as an output an enlarged reproduction of the essential features of its input. b) A device for increasing the amplitude of electric waves

ADDEND

ADDER

ALLOY

ALTERNATING CURRENT (AC)

ALTERNATOR

AMPERE

AMPLIFICATION

AMPLIFIER

a) PRIMARY
b) SECONDARY

AMPLITUDE	a) Extreme range of varying quantity, size, height. b) The strength or level of a signal.
AMPLITUDE MODULATION	a) Modulating a transmitter by varying the strength of the r-f carrier at an audio rate. b) Causing a radio wave to vary in strength by means of the audio.
ANODE	a) The plate in a vacuum tube which collects electrons emitted by the cathode. b) The positive terminal, such as the plate in the electron tube.
ANTENNA	a) A device used to propagate electromagnetic energy into or from the air, or space. b) A device for radiating or receiving radio waves.
ARMATURE	a) The revolving part in a generator or a motor, or the vibrating or moving part of a relay or buzzer. b) The movable part of a motor generator, buzzer or relay.
ASTABLE	a) Pertaining to a device that has two temporary states; the device alternates between these states with a period and duty cycle determined by circuit time constants. b) A device that has two temporary states and switches back and forth between the two states.
ATOM	a) Smallest particle that makes up a type of material called an element. b) Smallest particle of matter.
ATTENUATION	a) To lose or decrease or reduce the amplitude or intensity of a signal. b) Decrease in amplitude or intensity.
AUDIO	a) A term used to describe sound or signals which are descernible to the ear. b) Pertaining to sound.

AMPLITUDE

AMPLITUDE MODULATION

ANODE

ANTENNA

ARMATURE

ASTABLE

ATOM

ATTENUATION

AUDIO

AUGEND

a) In arithmetic addition, the number increased by having another number (called the addend) added to it
b) Same.

AUTOMATIC VOLUME CONTROL

a) Self-acting compensation device which maintains the output of a transmission system constant within narrow limits in the face of wide variations in attenuation in that system.
b) AVC

AUTOMATION

a) An industrial technique of employing automatic self-controlled machinery to replace human labor and control.
b) Machines doing the work of men.

AVERAGE VALUE

a) The value of an alternating current or voltage of sine waveform that is found by dividing the area under one alternation by the distance along the X-axis between 0° and 180°.
b) The average value equals .637 times the maximum voltage.

BANDWIDTH

a) The range of frequencies of a device, that conforms to a specified standard.
b) The range of frequencies over which a piece of equipment is designed to operate.

BATTERY

a) Several voltaic cells connected in series and parallel used as a source of voltage as produced by chemical means.
b) A means of producing electricity by chemical means.

BIAS

a) The d-c potential applied to the input grid of an electron tube; the d-c potential applied to elements of a transistor for controlling its mode of operation.
b) A voltage connected to a tube or a transistor used to determine its mode of operation.

BINARY

a) A numbering system using a base number or radix, of 2. There are two digits (1 and 0) in the binary system.
b) A number system having a base of 2, using only the symbols 0 and 1.

AUGEND

AUTOMATIC VOLUME CONTROL

AUTOMATION

AVERAGE VALUE

BANDWIDTH

BATTERY

BIAS

BINARY

a) PRIMARY
b) SECONDARY

CATHODE RAY TUBE (CRT)	a) A vacuum tube in which electrons are emitted from a cathode, shaped into a narrow beam and accelerated to a high velocity before striking a phosphor-coated viewing screen. b) An electron tube that produces a visible display of light.
CIRCUIT	a) A number of conductors connected together for the purpose of carrying an electrical current. b) The various connections and conductors of a specific device.
CHOKE	a) An inductance used to impede the flow of pulsating direct current or alternating current by means of its self-inductance. b) A coil of wire used to prevent the passage of pulsating currents, but allows DC to pass.
COIL	a) An electrical conductor wound on a form or in a spiral helix. b) Wire wrapped around a spool.
COMMUTATOR	a) On motors or generators, a group of bars providing connections between the armature coils and brushes. A mechanical switch to maintain current in one direction in the external circuit. b) A means of providing electrical connection between the rotating part of a motor or generator and an external circuit.
COMPUTER	a) An electronic calculator capable of performing mathematical gymnastics and operations, data processing and storage and processing of video and other electronic signals. b) An electronic machine used for solving math problems and storing information.
CONDUCTIVITY	a) The ability of any material to conduct an electric current. It is the reciprocal of resistance. b) How well a material will conduct electricity.

CATHODE RAY TUBE (CRT)

CIRCUIT

CHOKE

COIL

COMMUTATOR

COMPUTER

CONDUCTIVITY

a) PRIMARY
b) SECONDARY

CRYSTAL

a) A piece of quartz used to control the frequency of an oscillator by means of the piezoelectric effect.
b) Controls the number of cycles per second an oscillator will produce.

CURRENTS

a) The transfer of electrical energy in a conductor by means of electrons moving constantly and changing positions in a vibrating manner.
b) Electron flow or movement down a wire.

CYCLE

a) A set of events occurring in sequence. One complete reversal of an alternating current from positive to negative and back to a starting point.
b) A chain of events from start to finish.

DECIBEL

a) One tenth of a Bel. A unit used to express the relative increase or decrease in power. A unit used to express gain or loss in a circuit.
b) A unit of sound or power intensity.

DEMODULATION

a) The process of removing the modulating signal intelligence from the carrier wave in the radio receiver.
b) The detection of audio from a radio wave.

DIELECTRIC

a) The insulating material, such as mica, air, glass, etc., between the plates of a capacitor.
b) The insulation in a capacitor.

DIODE

a) An electron tube having two electrodes, a cathode and an anode.
b) A one-direction conducting component.

DIRECT CURRENT (DC)

a) An essentially constant-value current that flows in only one direction.
b) The flow of electrons in one direction.

CRYSTAL

CURRENTS

CYCLE

DECIBEL

DEMODULATION

DIELECTRIC

DIODE

DIRECT CURRENT (DC)

a) PRIMARY
b) SECONDARY

EFFECTIVE VALUE

a) That value of an alternating current sine wave form that has the equivalent heating effect of a direct current.
b) The effective value is .707 times the maximum value.

ELECTRICITY

a) Positive and/or negative charges at rest or in motion; it is a property of the basic particles of all materials consisting of electrons and protons; a form of energy generated by heat, light, friction, chemistry, or induction which has chemical, magnetic and radiant effects.
b) A natural force which can be harnessed by man to do useful work.

ELECTROMAGNETS

a) A coil wound on a soft iron core. When a current runs through the coil, the core becomes magnetized.
b) Turns of wire wrapped around a core when energized becomes a magnet.

ELECTRON

a) One of the natural elementary constituents of matter, it carries a negative electric charger.
b) A negatively charged particle.

ELECTRONICS

a) The field of science dealing with electron devices and their uses.
b) The science of electricity.

ELECTROSTATIC

a) A type of force field which surrounds a charged body in which its influence is felt.
b) A force around any charged body or particle.

EMITTER

a) In a vacuum tube, the element from which electrons are emitted. Sometimes called the cathode.
b) An element which will emit or discharge electrons from its surface.

ENERGY

a) That which is capable of producing work.
b) A force that can do something.

FEEDBACK

a) Transferring a voltage from the output of a circuit back to its input for the purpose of creating or preventing an oscillation.
b) Connecting the output signal of a current to its input.

EFFECTIVE VALUE

ELECTRICITY

ELECTROMAGNETS

ELECTRON

ELECTRONICS

ELECTROSTATIC

EMITTER

ENERGY

FEEDBACK

a) PRIMARY
b) SECONDARY

FILAMENT

a) The cathode of a thermionic tube, usually a wire or ribbon which is heated by passing a current through it.
b) The heating element in a vacuum tube.

FILTER

a) A selective network of resistors, inductors, or capacitors which offers comparatively little opposition to certain frequencies, while blocking other frequencies.
b) A circuit used to attenuate a specific band of frequencies.

FREQUENCY

a) The number of recurrences of a periodic phenomenon in a unit of time.
b) The number of complete cycles per second.

FULL WAVE RECTIFIER

a) A rectifier circuit consisting of two diodes, which produces a d-c pulse output for each half cycle of the applied alternating current.
b) A circuit that changes a-c to d-c and uses both alternations of a sine wave.

FUSE

a) A safety protective device which opens an electric circuit if overloaded. A current above the rating of the fuse will melt a fusible link and open the circuit.
b) An electrical safety valve that opens a circuit when there is a short.

GERMANIUM

a) A rare grayish white metallic chemical element. Symbol: GE; Atomic Wgt. 72.60; Atomic Number, 32, that is used for making transistors, diodes and integrated circuits.
b) The basic ingredient of semiconductor devices.

GRID

a) A fine wire placed between the cathode and plate, that controls electron flow in an electron vacuum tube.
b) The element in a tube that controls current flow.

GROUND

a) The common return circuit in electronic equipment whose potential is zero; a connection to earth by means of plates or rods.
b) The return path for current in a piece of electronic equipment.

FILAMENT

FILTER

FREQUENCY

FULL WAVE RECTIFIER

FUSE

GERMANIUM

GRID

GROUND

a) PRIMARY
b) SECONDARY

HALF-WAVE RECTIFIER

a) A rectifier which permits one half of an alternation of a-c to pass and rejects the reverse current of the remaining half cycle. Its output is pulsating d-c.
b) Changes a-c to d-c by utilizing half of a complete sine wave.

HASH

a) A completely random interfering signal usually caused by arcing and occasionally by natural environmental disturbances.
b) Electrical noise.

HEADPHONES

a) A receiver worn over the ear, for converting electrical energy at audio frequencies into sound energy waves.
b) Speakers worn over the ears for hearing sound.

HENRY

a) The unit of measurement of inductance. A coil has one henry of inductance if an emf of one volt is induced when the current through the inductor is changing at a rate of one ampere.
b) The measurement unit of electrical inductance.

HERTZ

a) A unit of frequency equal to one cycle per second.
b) Unit of frequency measurement.

HIGH FIDELITY

a) The abbreviation, Hi-Fi; a term used to describe high quality sound systems, a sound system which faithfully reproduces the original sound.
b) A sound that resembles the original sound with little or no distortion.

HYSTERESIS

a) The difference between the response of a unit or system to an increasing and a decreasing signal.
b) The property of a magnetic substance which causes the magnetization to lag behind the force that produces it.

IMPEDANCE

a) The total opposition a circuit offers to the flow of alternating current at a given frequency.
b) The total resistance to the flow of an AC current as a result of resistance and reactance.

HALF WAVE RECTIFIER

HASH

HEADPHONES

HENRY

HERTZ

HIGH FIDELITY

HYSTERESIS

IMPEDANCE

a) PRIMARY
b) SECONDARY

IMPURITY	a) Atoms within a crystalline solid which are foreign to the crystal. b) A chemical added to a crystal to make it a P type or N type material.
INDUCTANCE	a) The inherent property of an electric circuit that opposes a change in current. The property of a circuit whereby energy may be stored in a magnetic field. b) An electrical property that tends to oppose changes in current.
INPUT	a) The power or signal delivered to a device or circuit. b) An entrance point in a circuit where a signal is applied.
INSULATION	a) Poor conductors of electricity used to cover conductors and components to prevent short circuits and accidental shock hazards. b) Materials that do not readily conduct electricity.
IONIZATION	a) An atom is said to be ionized when it has lost or gained one or more electrons. b) When atoms lose or gain electrons.
KHZ	a) Kilohertz, the abbreviation, for; a unit of measure for frequency that represents one thousand cycles per second. b) A measure for frequency, number of cycles per second times one thousand.
LINEAR	a) Having an output that varies in direct proportion to the input. b) In a straight line.
LOGIC	a) A mathematical approach to the solution of complex situations by the use of symbols to define basic concepts. b) A science dealing with basic principles.
MEGOHMS	a) A practical unit of measure for electrical resistance that is one million times the basic unit of the ohm. b) One million ohms, the basic unit, of resistance.

IMPURITY

INDUCTANCE

INPUT

INSULATION

IONIZATION

KHZ

LINEAR

LOGIC

MEGOHMS

b) SECONDARY

MICROAMPERES

a) A practical unit of measure for electric current flow that means one/one-millionth of the basic unit - the ampere.
b) One/one-millionth ampere, the basic unit, of current.

MILLIAMETER

a) A meter which measures in the milliameter range of currents.
b) A meter which measures current.

MILLIAMPERES

a) A practical unit of measure for electric current flow that means one/one-thousandth of the basic unit, of current.
b) One/one-thousandth ampere, the basic unit of current.

MILLIVOLT

a) One-thousandth of a volt.
b) 1/1000 of a volt.

MILTIVIBRATOR

a) A relaxation oscillator in which the in-phase feedback voltage is obtained from two electron tubes or transistors.
b) An oscillator which vibrates back and forth.

MODULATED

a) A process by which amplitude or frequency of a sine wave voltage is made to vary according to variation of another voltage or current called the modulation signal.
b) Impressing intelligence, a signal, on a carrier wave.

MONOLITHIC

a) Existing as one large, undifferentiated whole formed within a single body of material.
b) Single layer.

MONOSTABLE

a) The term used to describe a circuit with one stable state and one quasi-stable state. The circuit requires an external trigger to perform.
b) One shot.

MICROAMPERES

MILLIAMETER

MILLIAMPERES

MILLIVOLT

MILTIVIBRATOR

MODULATED

MONOLITHIC

MONOSTABLE

a) PRIMARY
b) SECONDARY

NPN

a) A transistor consisting of three types of semiconductor material doped with Negative, Positive, and Negative impurities. Each junction of P and N material must be correctly biased for proper operation of the device.
b) A transistor made of negative, positive, and negative semiconductor materials.

OHM

a) One ohm is the value of resistance through which a potential difference of one volt will maintain a current of one ampere.
b) The unit of measurement of resistance.

OHMMETER

a) A direct-reading instrument for measuring electric resistance. Its scale is usually graduated in ohms, megohms or both.
b) A meter used to measure resistance in ohms.

OSCILLATOR

a) An electronic circuit that will produce an alternating current at a determined frequency.
b) A circuit that will produce a-c electronically.

OSCILLOSCOPE

a) An instrument primarily for making visible the instantaneous values of one or more rapidly varying electrical quantities as a function of time, or of another electrical or mechanical quantity.
b) A test instrument using a cathode-ray tube, permitting observation of a signal.

OUTPUT

a) The resultant signal or exit source from an electronic circuit or device.
b) What comes out of a circuit, i. e., heat, light, sound, etc.

OVERSHOOT

a) Amplitude of the first maximum excursion of a pulse beyond the 100% amplitude level expressed as a percentage of this 100% amplitude.
b) The initial transient response.

PEAK

a) The maximum value of a sine wave.
b) The maximum instantaneous value of a quantity.

NPN

OHM

OHMMETER

OSCILLATOR

OSCILLOSCOPE

OUTPUT

OVERSHOOT

PEAK

a) PRIMARY
b) SECONDARY

PENTODE

a) A type of electron vacuum tube consisting of a plate, three grids, and a cathode.
b) A five-element vacuum tube.

PERIOD

a) The time required for one complete cycle of a required repeating series of events.
b) The time for one complete cycle.

PN -

a) A junction of two semiconductor materials, one doped with a positive impurity and the other with a negative impurity. The PN junction forms a diode that allows a current flow through this component in only one direction.
b) A junction of semiconductor materials that acts like a diode.

PNP

a) A type of transistor consisting of three semiconductor materials doped with Positive, Negative, and Positive impurities respectively. The PNP transistor must be properly biased in order to operate correctly.
b) A transistor made of positive, negative, and positive doped semiconductor materials.

POTENTIOMETER

a) A electromechanical device having a terminal connected to each end of the resistive element and a third terminal connected to the wiper contact.
b) A variable resistor.

POWER

a) The rate at which work is done, units of power are: the watt, the joule and the kilowatt.
b) The rate of work.

PULSE

a) Often referred to as a transient response, it is a sudden rise and fall in current or voltage that may be produced purposely or accidently.
b) A spike of voltage or current.

REACTANCE

a) Opposition to the flow of alternating current. Capacitive reactance (Xc) is the oppostion offered by capacitors, and inductive reactance (X_1) is the oppostion offered by a coil.
b) The opposition to an alternating current.

PENTODE

PERIOD

PN

PNP

POTENTIOMETER

POWER

PULSE

REACTANCE

a) PRIMARY
b) SECONDARY

RECTIFICATION

a) The process of changing an alternating current to a direct current by means of a diode rectifier.
b) Converting a-c to d-c using a rectifier.

REGULATION

a) The holding constant of some condition (voltage, current power).
b) The voltage change that takes place in the output.

R-C

a) A type of circuit used in electronics consisting primarily of resistance and capacitive components of particular value to perform a specific function.
b) A circuit with resistors and capacitors.

R-F CHOKE

a) A coil designed to have a high inductive reactance at radio frequencies and used to prevent currents at these frequencies from passing from one circuit to another.
b) A coil made to operate at high frequencies.

RL

a) An electrical circuit consisting of resistive and inductive components of a particular value that exhibit a desired characteristic.
b) A circuit with resistors and inductors.

RESONANCE

a) A frequency at which a tuned (RLC) circuit oscillates and rejects any and all other frequencies. A condition where one a-c of a given frequency is allowed to pass and other frequencies are lost or attenuated.
b) Tuning in only one frequency and losing other frequencies.

RESPONSE

a) A quantitative expression of the output of a device or system as a function of the input.
b) A plot of output versus frequency.

RIPPLE

a) That portion of the output voltage of a power supply harmonically related in frequency to the input power and to any internally generated switching frequency.
b) The a-c component of the d-c output of a power supp

RECTIFICATION

REGULATION

R-C

R-F CHOKE

RL

RESONANCE

RESPONSE

RIPPLE

a) PRIMARY
b) SECONDARY

RISE TIME

a) The time required for the leading edge of a pulse to rise from 10% to 90% of its final value.
b) The measured length of time to change from a low to a high.

ROTOR

a) The rotating part of an a-c generator in comparison to the stator or stationary part of a generator.
b) The part of an a-c generator that moves.

SCHEMATIC

a) A diagram of an electrical or electronic circuit showing connections and identification of components by appropriate symbols.
b) A diagram of a circuit using symbols.

SECONDARY VOLTAGE

a) The voltage across the secondary winding of a transformer.
b) Voltage measured at output of transformer.

SEMICONDUCTOR

a) A type of crystallyne material used in transistors and diodes that is neither a conductor or an insulator, and that exhibits special useful properties.
b) The basic ingredient of diodes and transistors.

SERIES CIRCUIT

a) A circuit in which resistances or other components are connected end to end so that the same current flows throughout the circuit.
b) A circuit which contains only one possible path for electrons.

SHORT CIRCUIT

a) A direct connection across the source which provide a zero resistance path for the current.
b) A circuit which has zero resistance.

SHUNT

a) In an electric circuit, a branch of the winding which is in parallel with the external or line circuit.
b) To connect across or parallel with a circuit.

RISE TIME

ROTOR

SCHEMATIC

SECONDARY VOLTAGE

SEMICONDUCTOR

SERIES CIRCUIT

SHORT CIRCUIT

SHUNT

a) PRIMARY
b) SECONDARY

SIGNAL GENERATOR

a) A device which supplies a standard voltage generator. A device which supplies a standard voltage of known amplitude, frequency, and waveform for measuring purposes.
b) An electronic test instrument which produces a variable frequency.

SIGNAL

a) The intelligence, message, or effect to be sent over a communications system; an electrical wave corresponding to intelligence.
b) A voice, a picture, a sound, or code that passes through a circuit.

SILICON

a) A type of semiconductor material that is doped with an impurity and that is used in the making of integrated circuits, transistors, and diodes.
b) A basic ingredient of semiconductor diodes and transistors.

SINE WAVE

a) A wave which can be expressed as the sine of a linear function of time, space or both.
b) A wave form of a single frequency alternating current.

SOLID STATE

a) The physics of materials in their solid form, examples of solid state materials are: transistors diodes, solid state lasers.
b) Circuits and components using a semiconductor.

SPEAKER

a) An electroacoustic transducer that radiates acoustic power into the air with essentially the same waveform as that of the electrical input.
b) A loud speaker.

STATOR

a) The stationary part of an a-c generator in comparison to the movable part called the rotor. A magnetic field consisting of many turns of fine wire wound into coils.
b) The fixed or non-movable part of a motor.

SIGNAL GENERATOR

SIGNAL

SILICON

SINE WAVE

SOLID STATE

SPEAKER

STATOR

a) PRIMARY
b) SECONDARY

STORAGE OSCILLOSCOPE

a) An instrument that has the ability to store a CRT display in order that it may be observed for any required time.
b) An instrument which has the ability to store information.

SYNC

a) A pulse of voltage or current used to trigger a circuit or to synchronize an oscillator to start it at a particular time and to keep it on frequency.
b) A signal used to start a circuit into operation and/or to maintain a certain frequency.

SYNCHRONIZATION

a) The timing or controlling of a circuit or oscillator with respect to an external signal or event to maintain accurate frequency stability and control for a particular purpose such as to be in step with etc.
b) Locking an oscillator to a trigger so it will be in step with other oscillators and circuitry.

THERMISTOR

a) A solid state semiconducting device, the electrical resistance of which varies with the temperature. Its temperature coefficient of resistance is high, non linear and negative.
b) A semiconductor device which changes resistivity with a change in temperature.

THRESHOLD-VOLTAGE

a) The level of input voltage at which a binary logic circuit changes from one logic state to the other.
b) The point at which the PN junction begins to conduct.

THYRISTOR

a) A bi-stable device comprising three or more junctions. At least one of the junctions can switch between reverse and forward voltage polarity within a single quadrant of the anode-to-cathode-voltage-current characteristics.
b) A bi-stable device made up of three junctions.

TIME BASE

a) A voltage generated by the sweep circuit of a cathode ray tube indicator. Its waveshape is such that the trace is either linear with respect to time or if nonlinear is still at a known timing
b) Built in oscillator with different sweep frequenci

STORAGE OSCILLOSCOPE

SYNC

SYNCHRONIZATION

THERMISTOR

THRESHOLD-VOLTAGE

THYRISTOR

TIME BASE

a) PRIMARY
b) SECONDARY

TIME CONSTANT

a) The time required for an exponential quantity to change by an amount equal to 0.632 times the total change that will occur.
b) The time period required for the voltage across a capacitor in a resistor - capacitor circuit.

TRANSDUCER

a) A device that when actuated by signals from one or more systems or media can supply related signals to one or more other systems or media.
b) A device by which one form of energy may be converted to another form.

TRANSFORMER

a) An a-c component, consisting of sets of coils with inter-linked magnetic fields that are used for voltage step-up, step-down, and isolation.
b) A component used for voltage step-up or step-down.

TRANSIENT

a) A phenomenon caused in a system by a sudden change in conditions and which persists for a relatively short time after.
b) The response to a momentary signal or force.

TRANSISTOR

a) An active semiconductor device usually made of silicon or germanium having three or more electrod
b) A semiconductor device derived from two words, transfer and resistor.

TRANSIT TIME

a) The time taken for a charge carrier to cross a given path. The time an electron takes to cross the distance between the cathode and anode.
b) The time required for electrons to travel from cathode to plate.

TRIAC

a) A five larger NPNPN device that is equivalent to two ACR's connected in antiparallel with a common gate.
b) Two silicon rectifiers hooked back to back.

TRIGGER

a) To cause by means of one circuit, action to start in another circuit, which then functions for a certain length of time under its own control.
b) A pulse that starts an action.

TIME CONSTANT

TRANSDUCER

TRANSFORMER

TRANSIENT

TRANSISTOR

TRANSIT TIME

TRIAC

TRIGGER

a) PRIMARY
b) SECONDARY

TRIGGER LEVEL

a) The instantaneous level of a triggering signal at which a trigger is to be generated.
b) Control which selects the level.

TRIODE

a) A vacuum tube consisting of three elements, a plate, a cathode and a grid that is useful as an amplifier and/or oscillator, and other electronic applications.
b) A tube with three elements.

TUNED CIRCUIT

a) A circuit containing capacitance, inductance, and resistance in series or parallel. When energized at a specific frequency known as its resonance frequency, an interchange of energy occurs between the coil and the capacitor.
b) A resistor, capacitor, and inductor connected in series or parallel used to select a particular frequency.

UNIJUNCTION TRANSISTOR

a) A three-terminal semiconductor device exhibiting stable open-circuit, negative-resistance characteristics.
b) A silicon double-base diode.

UNMODULATED

a) The opposite of modulated, meaning that a wave or signal contains no intelligence; or that no information is being impressed on a carrier wave.
b) A radio wave with no voice or music, or other intelligence impressed upon it.

VARIAC

a) An auto transformer that contains a toroidal winding and a rotating carbon brush so that the output voltage is continuously adjustable from zero to line voltage plus 17%.
b) Auto transformer used to varying the AC line.

VICTOR DIAGRAM

a) A diagram showing direction and magnitude of sever forces, such as voltage and current, or resistance reactance, and impedance, for the purpose of mathematical analysis.
b) A mathematical drawing to compare two forces or quantities.

TRIGGER LEVEL

TRIODE

TUNED CIRCUIT

UNIJUNCTION TRANSISTOR

UNMODULATED

VARIAC

VICTOR DIAGRAM

a) PRIMARY
b) SECONDARY

VOLTAGE COMPARATOR

a) An amplifying device with a differential input that will provide an output polarity reversal when one input signal exceeds the other.
b) A circuit that compares two DC voltages.

VOLTAGE DIVIDER

a) A network of resistors or a tapped resistor, or a series of resistors connected across a source of voltage to produce multiple voltages.
b) A tapped resistor to obtain several different voltages.

VOLTMETER

a) An instrument for measuring potential difference. Its scale is usually graduated in volts.
b) A meter used to measure voltage.

VOLT-OHM-MILLIAMMETER

a) A test instrument with several ranges for measuring voltage, current, and resistance.
b) A meter which combines a Volt-Ohm-Milliammeter in one case.

VOLT

a) The unit of measure for electrical pressure, electromotive-force, and/or potential difference.
b) The pressure in an electrical current, the unit of measure.

WATT

a) A unit of the electric power required to do work at the rate of one joule per second.
b) Unit of measurement of Power.

WAVEFORM

a) The shape of a wave derived from plotting its instantaneous values during a cycle against time.
b) The shape of an electronic signal.

WAVELENGTH

a) The distance between a point on the loop of a wave to the corresponding point on an adjacent wave.
b) The physical distance between the same humps on a wave.

WAVE

a) A physical activity that rises and falls, or advanc and retreats, periodically as it travels through a medium.
b) A disturbance in a medium which is a function of time and space.

VOLTAGE COMPARATOR

VOLTAGE DIVIDER

VOLTMETER

VOLT-OHM-MILLIAMETER

VOLT

WATT

WAVEFORM

WAVELENGTH

WAVE

a) PRIMARY
b) SECONDARY

WHEATSTONE BRIDGE

a) A null type resistance meaning circuit in which resistance is measured by direct comparison with a standard resistance.
b) A resistance bridge.

ZENER DIODE

a) A two-layer device, that above a certain reverse voltage, has a sudden rise in current.
b) A silicon diode which makes use of breakdown properties of a PN junction.

WHEATSTONE BRIDGE

ZENER DIODE

CLUSTER WORDS

AC Coupling

AC Noise Immunity

AC Relay

Active RC Network

AC Voltage

AD Econder

Alternating Current

Ambient Noise

Ammeter Shunt

Amplification Factor

Amplifier Noise

Ampliture-Modulated Wave

Amplitude Modulation

AM Tuner

Analog Computer

Analog Network

AND Circuit

AND Gate

Armstrong Oscillator

Asynchronous Logic

Attenuation Ratio

Audio Frequency Choke

Banna Plug

Bandpass-Amplifier Circuit

Bandpass-Response

Band Reject Filter

Beta Cutoff Frequency

Bias Resistor

Bimetallic Strip

Binary Digit

Binary-To Decimal Conversion

Buffer Amplifier

Buffer Storage

Capacitive Coupling

Cascade Amplifier

Center Tap

Damped Waves

Darlington Amplifier

D'Arsonval Movement

Decade Box

Decade Counter

Decoupling Network

deMorgan' Theorem

Differential Amplifier _____

_____

Differential Comparator _____

_____

Electrolytic Capacitor _____

_____

Excitation Voltage _____

_____

Feedback Loop _____

_____

Flip-Flop Multivibrator _____

_____

Half-Wave Rectifier _____

_____

Hysteresis Loss _____

_____

Instantaneous Power _____

_____

Integrated Circuit _____

_____

Inverting Amplifier

Kirchoff's Can

Linear Circuit

Linear Integrated Circuit

Loading Noise

Logic Elements

Maximum Output

MOS Monocithic IC

Noise Immunity

Null Indicator

Open Circuit Voltage

Operational Amplifier_____

_____

Peak to Peak_____

_____

Peak Value_____

_____

Power Transformer_____

_____

Quiescent Point_____

_____

Read-Out Device_____

_____

Resonant Frequency_____

_____

Roll-Off_____

_____

Schmitt Trigger_____

_____

Schottky Barrier_____

_____

Shunt Regulator_____

_____

Single-Shot Multivibrator

Temperature Coefficient

Thermal Drift

Thermocouple

Tie Point

Vacuum Tube

Vacuum Tube Volt Meter

Voltage Regulator

Wien Bridge Oscillator

Wirewound Resistor